

REMARKS

Claims 1-36 were pending. Claims 15, 23, and 29 have been cancelled. Claims 1, 14, 16, 22, 28, 35, and 36 have been amended to clarify the nature of the presently claimed invention. Claims 37-39 have been added. Support for these new claims may be found in the Specification at least in FIGs. 15a, 15b, and 15c, in the accompanying description, and in the pending claims. Accordingly, claims 1-39 remain pending in the application after entry of the present amendment.

35 U.S.C. § 102(e) and § 103(a) Rejections

In the present Office Action, claims 1-7, 16-22, 30, and 33-36 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,836,785 (hereinafter “Bakshi”). In addition, claims 8-15 and 23-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bakshi in view of U.S. Patent 5,878,224 (hereinafter “Smith”). In addition, claims 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bakshi and “Getting Started with the Java Dynamic Management Kit 4.2.” Applicant has reviewed the cited references and notes that all of the above rejections depend on the teachings of Bakshi. Applicant has amended the independent claims to clarify the nature of the presently claimed invention and submits each of the pending claims recite features neither disclosed nor suggested by the combination of cited art. Accordingly, Applicant traverses the above rejections and requests reconsideration in view of the following comments.

Claim 1, as amended, recites a method that includes, in part:

- “b1. evaluating a first condition, which involves whether the server operation parameter passes a first threshold value in a first direction, and

b2. evaluating a second condition, which involves whether the server operation parameter passes a second threshold value in a second direction, wherein the second condition includes determining that the second direction is opposite to the first direction, and extends from the first threshold value to the second threshold, ...”
(Emphasis added).

It is noted that evaluating the second condition explicitly includes a determining step that the second direction is opposite to the first direction.

On pages 5-6 of the present Office Action, the Examiner suggests Bakshi teaches

“a variety of conditions that are monitored to determine if a value has passed in either direction (e.g., Bakshi col. 2, lines 13-25 and col. 5, lines 3-29; see also col. 4, lines 44-59). Applicant has not offered a persuasive reason as to why exceeding or failing below percentage threshold values fails to meet the claim limitation of ‘pass[ing] a second value in a second direction.’ ... ”

However, as noted above, claim 1 now recites that the second condition includes determining that the second direction is opposite to the first direction. No such determination is found in Bakshi. While it may be true that different conditions result in passing a threshold in different directions in Bakshi, there is no mention of determining the direction for a particular threshold-passing event in relation to any other threshold-passing event. Accordingly, Applicant finds no teaching or suggestion in Bakshi “evaluating a second condition, which involves whether the server operation parameter passes a second threshold value in a second direction, wherein the second condition includes determining that the second direction is opposite to the first direction,” as is recited in claim 1.

For at least these reasons, claim 1 is patentably distinguishable from the cited art. As claims 16, 35, and 36 include features similar to those discussed above, each of claims 16, 35, and 36 is patentably distinguishable for at least the above reasons as well. Further, as each of the dependent claims includes at least the features of the independent

claim upon which it depends, each of the dependent claims is believed to be patentably distinguishable for at least the above reasons as well.

In addition to the above, the dependent claims recite further features not found in the cited art. For example, claim 3 recites:

“The method of claim 1, wherein the third condition of step c. comprises the fact the second condition has not been verified during a grace period after the first condition has been verified, and the fourth condition of step d. comprises the fact the second condition has been verified after the third condition has been verified.”

On page 6 of the present Office Action, the Examiner suggests Bakshi teaches the third condition at col. 4, line 54-col. 5, line 2, where a grace period is calculated. However, Bakshi merely teaches that to avoid false overload indications a first condition may be re-evaluated after a predetermined time. More particularly, Bakshi discloses:

“As described above, the overload status of the processor 300 can be determined based on an arrival rate of the requests and a processing rate of the processor 300 or by any other well known methods. As further described above, the overload status of the processor 300 can be determined by the controller 200. For example, if the processing rate of incoming requests is 10 requests/minute and the incoming call rate is 5 requests/minute, then the processor is not overloaded because the processor 300 is able to handle all incoming requests. Alternatively, if the processing rate remains at 10 requests/minute, then the incoming request rate increases to 15 requests/minute, then after a predetermined period of time, the processor 300 can be determined to be overloaded.

The predetermined period of time can be as small as no time at all, or as large as necessary. The predetermined time can be set based on design requirements for the system, such as processing speed of the processor 300, the buffer size of the variable size buffer 306, and a desired delay time for requests waiting in a queue. The predetermined time limit is mainly to avoid the detection of a false overloaded state of the processor when the incoming call rate is merely temporarily experiencing a spike in the incoming request traffic volume, as opposed to a longer and sustained increase in incoming request traffic.” (Bakshi, col. 4, line 45 – col. 5, line 2).

As may be seen from the above, Bakshi describes evaluating the incoming request rate and comparing it to the processing rate, both before and after the predetermined period of time. Therefore, Bakshi verifies a single condition before and after the grace period. In contrast, claim 1 recites two conditions that, as discussed above, are different at least because the second condition includes determining that the second direction is opposite to the first direction.

Alternatively, Bakshi discloses comparing buffer usage to a threshold. However, these comparisons are not part of the determination of an overload condition to which the grace period applies (see Bakshi, block 420 in FIG. 2). Instead, the threshold to which buffer usage is compared is determined by whether or not a server is overloaded irrespective of any previous buffer usage evaluations. Accordingly, Applicant finds no teaching or suggestion in Bakshi that “the third condition of step c. comprises the fact the second condition has not been verified during a grace period after the first condition has been verified,” as is recited in claim 3. For at least these additional reasons, claim 3 is patentably distinguishable from the cited art. As claim 18 includes features similar to those discussed above, claim 18 is patentably distinguishable for at least the above reasons as well.

Further, claim 15 recites, the method of claim 14 “wherein the third rate is not lower than the first rate.” Smith col. 8, lines 13-34 is cited as teaching these features. However, Applicant finds no mention anywhere in Smith of performing measurements at different rates. Instead, Smith merely discloses measurements that are performed over a “measurement interval.” Choosing a particular duration for a measurement interval would result in a corresponding rate. However, Smith is silent as to any particular choice of a measurement interval and does not disclose plural measurement intervals of different durations.

Still further, new claim 37 recites a device configured to:

“compare values of the server operation parameter to a first threshold value;
in response to detecting that the server operation parameter has passed the first threshold value in a first direction;
compare values of the server operation parameter to a second threshold value, wherein the second threshold value is different from the first threshold value;
start rejection of input requests in response to detecting the server operation parameter has not passed the second threshold value in a direction opposite the first direction during a grace period; and
terminate rejection of input requests in response to detecting the server operation parameter has passed the second threshold value in a direction opposite the first direction during the grace period.” (Emphasis added).

It is noted that comparisons of the values of the server operation parameter to a second threshold value is in response to detecting that the server operation parameter has passed the first threshold value in a first direction and the second threshold value is different from the first threshold value. In contrast, the teachings of Bakshi differ from claim 37 in that Bakshi evaluates a single condition to determine if the server is overloaded; for example, whether or not the rate of incoming requests is greater than a processing rate of the server for a prolonged period of time. The processing rate of the server is analogous to a single threshold. Bakshi teaches that to avoid false overload indications a first condition may be re-evaluated after a predetermined time. More particularly, Bakshi discloses:

“As described above, the overload status of the processor 300 can be determined based on an arrival rate of the requests and a processing rate of the processor 300 or by any other well known methods. As further described above, the overload status of the processor 300 can be determined by the controller 200. For example, if the processing rate of incoming requests is 10 requests/minute and the incoming call rate is 5

requests/minute, then the processor is not overloaded because the processor 300 is able to handle all incoming requests. Alternatively, if the processing rate remains at 10 requests/minute, then the incoming request rate increases to 15 requests/minute, then after a predetermined period of time, the processor 300 can be determined to be overloaded.

The predetermined period of time can be as small as no time at all, or as large as necessary. The predetermined time can be set based on design requirements for the system, such as processing speed of the processor 300, the buffer size of the variable size buffer 306, and a desired delay time for requests waiting in a queue. The predetermined time limit is mainly to avoid the detection of a false overloaded state of the processor when the incoming call rate is merely temporarily experiencing a spike in the incoming request traffic volume, as opposed to a longer and sustained increase in incoming request traffic.” (Bakshi, col. 4, line 45 – col. 5, line 2).

As may be seen from the above, Bakshi describes evaluating the incoming request rate and comparing it to the processing rate, both before and after the predetermined period of time. Therefore, there is only one threshold for both comparisons, namely, the processing rate. Alternatively, it may be argued that Bakshi teaches comparing buffer usage to two different thresholds. However, these comparisons are not performed until after a determination is already made that the server is or is not overloaded. There is only one threshold for buffer usage if the server is overloaded and a different threshold for buffer usage if the server is not overloaded. Further, Bakshi does not teach or suggest evaluating buffer usage against a second threshold in response to detecting that buffer usage has passed a first threshold. Instead, the threshold to which buffer usage is compared is determined by whether or not a server is overloaded irrespective of any previous buffer usage evaluations. Accordingly, applicant finds no teaching or suggestion in Bakshi of a device configured to “in response to detecting that the server operation parameter has passed the first threshold value in a first direction: compare values of the server operation parameter to a second threshold value, wherein the second threshold value is different from the first threshold value,” as is recited in claim 37.

For at least these reasons, claim 37 is patentably distinguishable from the cited art. Further, as each of dependent claims 38 and 39 includes at least the features of the

independent claim upon which it depends, each of dependent claims 38 and 39 is believed to be patentably distinguishable for at least the above reasons as well.

In view of the above, Applicant submits all claims are patentably distinguishable from the cited art. Accordingly, withdrawal of the rejections is requested.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-78600/RDR.

Respectfully submitted,

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